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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/824,384	04/15/2004	Martin Kleen	32860-000726/US 6632		
	7590 04/04/200 CKEY & PIERCE, P.L	EXAMINER			
P.O.BOX 8910	•		LEUBECKER, JOHN P		
RESTON, VA	20195		ART UNIT	PAPER NUMBER	
			3739		
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE		
3 MO	NTHS	04/04/2007	DAPER		

## Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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	Application No.	Applicant(s)	
	10/824,384	KLEEN ET AL.	
Office Action Summary	Examiner	Art Unit	
	John P. Leubecker	3739	
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet w	vith the correspondence address	•
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO e, cause the application to become A	ICATION. reply be timely filed  NTHS from the mailing date of this communic BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 15 A	April 2004.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	s action is non-final.		
3) Since this application is in condition for allowa	ance except for formal ma	tters, prosecution as to the meri	ts is
closed in accordance with the practice under I	Ex parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) <u>1-47</u> is/are pending in the application	1.		
4a) Of the above claim(s) is/are withdra			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-47</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement.		
Application Papers			
9) The specification is objected to by the Examine	er.	•	
10) ☐ The drawing(s) filed on 15 April 2004 is/are: a		ected to by the Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeya	ince. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	ction is required if the drawing	g(s) is objected to. See 37 CFR 1.1	21(d).
11) The oath or declaration is objected to by the Ex	xaminer. Note the attache	ed Office Action or form PTO-15	2.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)⊠ All b)☐ Some * c)☐ None of:			
<ol> <li>Certified copies of the priority document</li> </ol>	ts have been received.		
<ol><li>Certified copies of the priority document</li></ol>	ts have been received in a	Application No	
3. Copies of the certified copies of the prior	ority documents have been	n received in this National Stage	<b>)</b>
application from the International Burea	•		
* See the attached detailed Office action for a list	t of the certified copies no	t received.	
Attachment(s)			

1)	$\triangle$	Notice	Οī	References	Cited	(PI	0-892	)

4) L	
	Paper No(s)/Mail Date

5) Notice of Informal Patent Application

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<sup>2)</sup> Notice of Draftsperson's Patent Drawing Review (PTO-948)

<sup>3)</sup> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/15/04.

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## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18-21, 34-38, 42 and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Meron et al. (WO 00/22975).

Meron et al. disclose an RF transmitter/receiver with an antenna (41), an imaging device (46), a controller (not numbered but included in circuitry for receiving external commands, note page 13, lines 5-7), a dye container (55), and an exit opening/channel (58 and pouch opening in 56'). The container is rigid (defined by 59,52) with a stretchable rubber diaphragm (54) and an elastic pouch (air container) (56).

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1-5, 7, 9, 11, 15-17, 22, 25-27, 39, 40 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meron et al. (WO 00/22975) in view of Madar et al. (US 2004/0092825).

Meron et al. fails to teach a controlled release or closing of the opening in the container. Madar et al. disclose a similar device in which an electromechanical valve (374a, [0156]) is used to control release of a marker ([0156]). This would provide for a "repeatedly actuatable closure" (as per claim 1), a valve or voltage controlled closure mechanism, as per the other claims. It would have been obvious to one of ordinary skill in the art to have replaced the pin mechanism of Meron et al. with an electromechanical valve of Madar et al. since one of ordinary skill would recognize the benefits of providing a controllable closure mechanism. This would allow multiple doses to be administered, improve the timing at which they are administered, and allow for an emergency shut-off in the case that it is necessary.

5. Claims 6, 8, 10, 12-14, 23, 24, 28-33, 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meron et al. in view of Madar et al., as set forth above, and further in view of Bertera (U.S. Pat. 5,368,582).

Meron et al., as modified by Madar et al., still fails to disclose any particular electromechanical actuator mechanism for opening and closing the valve. The Examiner takes the position that it would not involve any inventive effort for the skilled artisan to select from any of the known electromechanical actuators that would serve to control the valve taught by Madar et al. The Examiner also takes the position that piezoelectric crystal actuators are well known in the art. Bertera is just one reference of many that is cited to evidence that piezoelectric

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crystal actuators have be contemplated and used to control a fluid outlet valve (note col.4, lines 8-14, for example). It would have been obvious to one of ordinary skill in the art to have chose any known electromechanical actuator, including piezoelectric types, to "fill in the gaps" left by Madar et al. with ordinary knowledge. And because of their small size (with respect to actuation force), piezoelectric actuators would be desirable for use in small devices (i.e., capsule endoscopes).

## Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note references cited on the attached PTO-892 for fluid transfer devices and capsule endoscopes. It is noted that claims 18, 34 and 42 does not require structure to make the device "wireless", and thus could (perhaps in the future) be met by an traditional endoscope.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John-P. Leubecker Primary Examiner